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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/640,168	08/15/2000	Hugh J. McLarty	09623-027700US	5174

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TOWNSEND AND TOWNSEND AND CREW, LLP  
TWO EMBARCADERO CENTER  
EIGHTH FLOOR  
SAN FRANCISCO, CA 94111-3834

EXAMINER

KUMAR, SRILAKSHMI K

ART UNIT	PAPER NUMBER
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2675

DATE MAILED: 12/17/2003

16

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/640,168

**Applicant(s)**

MACLARTY ET AL

**Examiner**

Srilakshmi K. Kumar

**Art Unit**

2675

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on 03 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 5-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 5-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Response to Amendment***

The following office action is in response to Amendment C, filed December 3, 2003. Claims 1, 2, 9, 15, and 18 have been amended. Claim 4 has been cancelled. Claims 1-3, 5-19 are pending.

***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 1-3, 5-19 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

With respect to independent claim 1, applicant has amended the claim to disclose “and coupled to said computer via a shared peripheral bus that is different from an internal bus residing in said host computer; a first shared peripheral bus interface coupling said internal bus to said shared peripheral bus.” The specification does not disclose an internal bus. Further, the specification does not disclose where a first shared peripheral bus interface couples an internal bus to said shared peripheral bus.

With respect to independent claims 15 and 18, see the above rejection of claim 1, and further, applicant has amended the claim to disclose, “a power input connected to said shared peripheral bus so that the power for said second display screen is derived from said shared

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peripheral bus.” The specification does not disclose a power input connected to said shared peripheral bus.

The dependent claims 2, 3, 5-14, 16, 17 and 19 are also rejected under 35 U.S.C. 112, first paragraph, as they depend upon a rejected base claim.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-3, 5, 6, 8-10 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee (US 6,191,758) in view of Shimotono (US 6,509,911).

As to independent claim 1, Lee discloses a host computer (fig. 1, item 14), a first monitor connected to said host computer (10), a second monitor (12) separate and unattached to said first monitor and smaller than said first monitor (12), and coupled to said computer via a shared peripheral bus that is different from an internal bus residing in said host computer; a first shared peripheral bus interface coupling said internal bus to said shared peripheral bus. Lee does not disclose a separate bus. Shimotono discloses in col. 5, lines 26-37, where a bridge-circuit 240 in this embodiment has a USB (Universal Serial Bus) host controller and a routing hub for connecting a USB and a USB port 238, which is formed in the wall of the computer 100. The USB supports a hot plugging function for the insertion and removal of additional peripheral devices (USB devices) while the computer 100 is powered on, and a plug-and-play function for automatically identifying newly connected peripheral devices and for re-setting the system

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configuration. A maximum of 63 USB devices can be daisy-chained and connected to a single USB port. Example USB devices are keyboards, mouse, joysticks, scanners, printers, modems, display motors, and tablets. It would have been obvious to one of ordinary skill in the art that the monitor system of Lee to incorporate the separate peripheral bus in order to connect secondary monitors as well as other peripheral devices.

a video driver (Fig. 5, item 516) in said host computer for providing a portion of a display on said first monitor to said second monitor (col. 1, line 64-col 2, line 13, col. ); a first memory (Fig. 6, item 614) and a second memory (Fig. 6, item 616); said video driver comparing first and second memory to determine whether or not a first portion of an image displayed on said second monitor is to be modified and a second portion of said image displayed on said second monitor is unmodified (col. 6, lines 39-65); and wherein image data corresponding to said first portion of said image are transmitted to said second monitor and image data corresponding to said second portion of said image are not transmitted to said second monitor (col. 6, lines 39-65).

As to dependent claim 2, limitations of claim 1, and further comprising, wherein said shared peripheral bus is a universal serial bus (USB), and wherein a peripheral device other than said second monitor is coupled to said host computer. Shimotono disclose in col. 5, lines 26-37, where a bridge-circuit 240 in this embodiment has a USB (Universal Serial Bus) host controller and a routing hub for connecting a USB and a USB port 238, which is formed in the wall of the computer 100. The USB supports a hot plugging function for the insertion and removal of additional peripheral devices (USB devices) while the computer 100 is powered on, and a plug-and-play function for automatically identifying newly connected peripheral devices and for re-setting the system configuration. A maximum of 63 USB devices can be daisy-chained and

connected to a single USB port. Example USB devices are keyboards, mouse, joysticks, scanners, printers, modems, display motors, and tablets. It would have been obvious to one of ordinary skill in the art that the monitor system of Lee to incorporate the separate peripheral bus in order to connect secondary monitors as well as other peripheral devices.

As to dependent claim 3, limitations of claim 2, and further comprising, wherein said second monitor is powered by said shared peripheral bus (fig. 2, item bus, col. 4, line 54-col. 5, line 23).

As to claim 5, limitations of claim 1, and further comprising wherein said portion of a display comprises a separate window from said first monitor (col. 5, line 40-col. 6, line 3).

As to claim 6, limitations of claim 1, and further comprising wherein said portion of a display is provided only to said second monitor (col. 5, line 40-col. 6, line 3).

As to claim 8, limitations claim 1, and further comprising, a software operating system controlling said first computer, said operating system controlling the transmission of video data to said second monitor (col. 5, lines 30-56).

As to claim 9, limitations of claim 1, and further comprising, wherein said second monitor includes, a display screen (12), a display controller (Fig. 2, item 218) coupled to said display screen (12), a video memory (206 & 208) coupled to said display controller, a second shared peripheral bus interfaced coupled to said video memory. Shimotono disclose in col. 5, lines 26-37, where a bridge-circuit 240 in this embodiment has a USB (Universal Serial Bus) host controller and a routing hub for connecting a USB and a USB port 238, which is formed in the wall of the computer 100. The USB supports a hot plugging function for the insertion and removal of additional peripheral devices (USB devices) while the computer 100 is powered on,

and a plug-and-play function for automatically identifying newly connected peripheral devices and for re-setting the system configuration. A maximum of 63 USB devices can be daisy-chained and connected to a single USB port. Example USB devices are keyboards, mouse, joysticks, scanners, printers, modems, display motors, and tablets. It would have been obvious to one of ordinary skill in the art that the monitor system of Lee to incorporate the separate peripheral bus in order to connect secondary monitors as well as other peripheral devices.

As to claim 10, limitations of claim 1, and further comprising wherein display screen on said second monitor is less than 8.5 inches diagonally. Lee shows in Fig 1, where the second monitor display is considerably smaller than the first. It would have been obvious to one of ordinary skill in the art that the second display screen could have easily been smaller than 8.5 inches diagonally.

As to independent claim 18, limitations of claims 1 and 15, above and further comprising, wherein said second monitor includes, a display screen (Fig. 6, item 54), a display controller (Fig. 6, item 612) coupled to said display screen, a video memory (Fig. 6, item 622) coupled to said display controller, a bus interfaced coupled to said video memory (Fig. 6, bus).

5. Claims 11-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee and Shimotono applied to claim 1, and further in view of Grossman et al. (US 5,682,486).

As to claim 11, limitations of claim 1, wherein second monitor includes a touch screen. Lee does not disclose where the second monitor is a touch screen, Grossman et al disclose a monitor system comprising a plurality of monitors connected to the same host computer where the auxiliary monitor (Fig. 1, item 150) is an LCD display (col. 2, lines 54-55). It would have been obvious to one of ordinary skill in the art that certain displays could have been liquid

crystal displays which can be touch screens. Touch screens are advantageous as they provide the user with a user input type of device as well as a display. The system of Lee is combinable with that of Grossman et al as they both disclose monitor systems comprising a plurality of monitors connected to the same host computer.

As to claims 12 and 13, limitations of claim 1, and further comprising wherein said second monitor includes icon for control of a display on said first monitor. In col. 3, lines 20-35, Grossman et al disclose where the icons or windows or animated images maybe transmitted to the second monitor. It would have been obvious to one of ordinary skill in the art that these features shown by Grossman et al could have been incorporated into that of Lee as both systems disclose a monitor system comprising a plurality of monitors connected to the same host computer and the transmission of video data to the second monitor is advantageous as it allows the user to have selectable icons without cluttering the first monitor.

As to claim 14, limitations of claim 13 and further comprising wherein said transmission capability is wireless. Though neither Lee nor Grossman et al disclose a wireless transmission, it would have been obvious to one of ordinary skill in the art that wireless transmissions are incorporable into both systems as wireless systems such as a personal digital assistants are a commonplace as they allow users extensive mobility.

6. Claims 7, 15-17 and 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lee in view of Shimotono as applied to claim 1 above, and further in view of Craig (US 5,790,176).

As to independent claim 15, limitations of claim 1, and further comprising, a display screen on said second monitor of less than 8.5 inches diagonally; Lee shows in Fig 1, where the second monitor display is considerably smaller than the first. It would have been obvious to one



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of ordinary skill in the art that the second display screen could have easily been smaller than 8.5 inches diagonally.

a display controller coupled to said display screen (16), a video memory (36) coupled to said display controller, a bus interfaced coupled to said video memory (14), second monitor is powered by said shared peripheral bus (fig. 1, item 14, col. 6, lines 19-30)

a compression unit in said host computer for compressing said portion of said display for transmission to said second monitor; Lee and Grossman et al fail to disclose a compression unit. Craig discloses an MPEG encoder as shown in the abstract. It would have been obvious to one of ordinary skill in the art to incorporate an MPEG encoder into that of Lee and Grossman et al as Craig is transmitting video over a network, similar to that of Grossman et al. The MPEG encoder for video is advantageous as it provides compressed video, which can in turn be transmitted at higher speeds.

As to dependent claim 7, limitations of claim 1, and further comprising, a compression unit in said host computer for compressing said portion of said display for transmission to said second monitor; Lee and Grossman et al fail to disclose a compression unit. Craig discloses an MPEG encoder as shown in the abstract. It would have been obvious to one of ordinary skill in the art to incorporate an MPEG encoder into that of Lee and Grossman et al as Craig is transmitting video over a network, similar to that of Grossman et al. The MPEG encoder for video is advantageous as it provides compressed video, which can in turn be transmitted at higher speeds.

As to claim 16, see claim 4, above.

As to claim 17, see claim 8, above.

As to claim 19, see claim 1, above.

***Response to Arguments***

7. Applicant's arguments with respect to claims 1, 15 and 18 have been considered but are moot in view of the new ground(s) of rejection.

With respect to Claims 1, 15 and 18, the newly added limitations are rejected as shown above by 35 USC 112, 1<sup>st</sup> Paragraph on the grounds of enablement. As disclosed above, the newly added limitations are not disclosed in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The specification does not disclose an internal bus. Further, the specification does not disclose where a first shared peripheral bus interface couples an internal bus to said shared peripheral bus. With respect to claims 15 and 18, the limitation of where a power input is connected to said shared peripheral bus is not disclosed by the specification.

***Conclusion***

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks  
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**Or faxed to:**

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**Or:**

(703) 308-6606 (for informal or draft communications, please label  
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Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal drive,  
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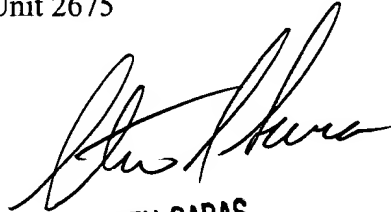
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Srilakshmi K. Kumar whose telephone number is 703 306 5575. The examiner can normally be reached on 8:00 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven J. Saras can be reached on 703 305 9720. The fax phone numbers for the organization where this application or proceeding is assigned are 703 872 9314 for regular communications and 703 308 9051 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 305 4700.

Srilakshmi K. Kumar  
Examiner  
Art Unit 2675

SKK  
December 10, 2003



STEVEN SARAS  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600